

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 09/787,016B
Source: IFW16
Date Processed by STIC: 5/6/5

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 05/06/2005

PATENT APPLICATION: US/09/787,016B

TIME: 13:36:59

Input Set : A:\Sequence.txt

Output Set: N:\CRF4\05052005\I787016B.raw

```

3 <110> APPLICANT: Alonso, Carlos M.
4     Domingo, David G.
5     Grandien, Alf
6     Leonardo, Esther
7     Martinez, Pedro
9 <120> TITLE OF INVENTION: Genes Encoding for the Human and Murine Death
10    Inducer-Obliterator-1
12 <130> FILE REFERENCE: 46309-253995
14 <140> CURRENT APPLICATION NUMBER: US 09/787,016B
15 <141> CURRENT FILING DATE: 2001-08-30
17 <150> PRIOR APPLICATION NUMBER: PCT/GB99/03019
18 <151> PRIOR FILING DATE: 1999-09-10
20 <150> PRIOR APPLICATION NUMBER: SE 9803069.5
21 <151> PRIOR FILING DATE: 1998-09-10
23 <150> PRIOR APPLICATION NUMBER: US 60/100,873
24 <151> PRIOR FILING DATE: 1998-09-17
26 <160> NUMBER OF SEQ ID NOS: 6
28 <170> SOFTWARE: PatentIn version 3.3
30 <210> SEQ ID NO: 1
31 <211> LENGTH: 2610
32 <212> TYPE: DNA
33 <213> ORGANISM: Homo sapiens
35 <400> SEQUENCE: 1
36 ctcggtggcc gtccgcccac tccgcggcgt tcggggaaat ggctgcgaga ccctagaggc      60
38 ctgcggagct tactccacgg gaacagcctc tagataatct gagttgttga aaatacgaag      120
40 cctgttactc gtgaacagtg gctgacaaca gtgttgttgt gagcctggct gtctgcttgg      180
42 acccagaggt ttcgtctgcc agggtttttg gttgtattta ggatttcagg gaaaagtgtc      240
44 caagctttca gtgttggagc aggtatggac gacaaaggcg acccgagcaa tgaggaggca      300
46 cctaaggcca tcaaaccac cagcaaagag ttcaggaaaa catggggttt tcgaaggacc      360
48 actatcgcca agcgagaggg cgcaggggac gcgaggctg acccactgga gccgccaccc      420
50 ccacagcagc agctgggcct gtccctgcgg cgcagtggga ggcagcccaa gcgcactgag      480
52 cgcgtggagc agttcctgac cattgcgcgg cgcgcggca ggaggagcat gcctgtctcc      540
54 ctggaggatt ctggtgagcc cacgtcctgc cccgccacag acgccgagac agcctccgag      600
56 ggcagcgtgg aaagcgcttc tgagaccaga agcggccccc agtctgcttc cacagctgtg      660
58 aaggaacgac cagcctcttc tgaaaagggtg aaaggagggg atgaccacga tgacacctcc      720
60 gatagtgaca gcgatggcct gaccttgaaa gagcttcaga atcgcttcg caggaagcgg      780
62 gaacaggagc ccactgagag gcccttgaaa gggatccaga gtcgcctgcg gaagaagcgc      840
64 cgggaggagg gtcccgcga gactgtgggc tccgaggcca gtgacactgt ggagggcgctc      900
66 ctgcccagta agcaggagcc cgagaacgat caggggggtg tgtcccaggc tgggaaagat      960
68 gacagagaga gtaagtggga gggaaaggcg gctcaggaca tcaaagatga ggagcctgga      1020
70 gacttggggc gaccgaagcc tgaatgtgag ggttacgacc ccaacgcctt gtattgcatt      1080
72 tgccgccagc ctcacaacaa caggtttatg atttgctgtg accgctgtga agaattggttt      1140
74 catggcgatt gtgtgggcat ttctgaggct cgagggaggc ttttggaaaag gaatggggaa      1200

```

RAW SEQUENCE LISTING

DATE: 05/06/2005

PATENT APPLICATION: US/09/787,016B

TIME: 13:36:59

Input Set : A:\Sequence.txt

Output Set: N:\CRF4\05052005\I787016B.raw

```

76 gactatatct gcccaaactg caccattctg caagtgcagg atgagactca ttcagaaacg 1260
78 gcagatcagc aggaagctaa atggagacct ggagatgctg atggcaccga ttgtacaagt 1320
80 ataggaacaa tagagcagaa gtctagcgaa gaccaaggga taaagggtag aattgagaaa 1380
82 gctgcaaact caagtggcaa gaagaaactc aagatcttcc agcctgtgat agaggcgctt 1440
84 ggtgcctcaa aatgtattgg ccccggtgct tgtcacgtgg cgcagccga ctcggtgtac 1500
86 tgcagtaatg actgtatcct caaacacgcc gcagcgacaa tgaagtttct aagctcaggt 1560
88 aaagaacaga agccaaagcc taaagaaaag atgaagatga agccagagaa gccagtcctt 1620
90 ccgaaatgcg gtgctcaggc aggtattaaa atctcttctg tgcacaagag accagctcca 1680
92 gaaaaaaaaa agaccacagt gaagaaggca gtggtggtcc ctgcgcggag tgaagcactc 1740
94 gggaagggaag cagcttgtga gagcagcacg ccgtcgtggg cgagcgatca caattacaat 1800
96 gcagtaaagc cagaaaagac tgctgctccc tcgccgtcac tgtgtataa atgtatgtat 1860
98 cacctagggg ttggcctcct ggaccctcct cgttcttctt ggatagccat cccctgggcc 1920
100 tgtccaggac tgggagttgc agcttttgtt taagctgatc acagacaccg gctgcaccat 1980
102 cagcgggaag cagagcccat gtccaggatg cctcctgctg ccctgtgtcc atccctagtc 2040
104 tgtcaggact tctgtcact gttttccaaa gctgtaaac tactggtga acgttcacct 2100
106 taatgattga ttctttaatc tctgttttca ctctcaggct ctggttaagta tttgtattct 2160
108 cttcatccca gtctgattgc atagccacac tgcccggcac gccacatcca cccctgtctg 2220
110 cacatgagtt gttctgacaa cagcgtgta tacgcttcag tttttccaca ttgtccacgg 2280
112 ccagcacatg aaagcatcac ttctttttta tgttgtggga atctttgcaa gttagtgttg 2340
114 catctgattt tcaggtgtac atttattttt gactgggcag ataggggatt tttttttttt 2400
116 tccatgtccg attcacacgc tacacaccca catgaacaca ttcgaacttc gaaggcacac 2460
118 actcctgctt cataggcccc acggttaagt agttcacacc tagaactctg tcctgaccgc 2520
120 aggacgcgtg ccttggactt ggtattctac atgtgactgg ctttcttgcc ctcgtctctt 2580
122 gaatgtttag actcttaaga tcatatcctg 2610
125 <210> SEQ ID NO: 2
126 <211> LENGTH: 2867
127 <212> TYPE: DNA
128 <213> ORGANISM: Murine spp.
130 <400> SEQUENCE: 2
131 tccgtggtag ctctggaaat ggctgcggga tcccggcggc cggggagctt gtttaagagg 60
133 cagtccccac tgtccctttg gttgttcgaa gctccggaat cttctcattg atgaactgtg 120
135 actgacaaca gtggggtgag gcttggccgt ctgcttgacc tggccccagg tctataattt 180
137 tatgtaggat ttccagccaa aggtttccaa gctttcagtt ttgggacagg tatggatgat 240
139 aaagggcacc tgagcaatga ggaagcacc aaggctatca aaccaccag taaggagttc 300
141 aggaaaacct ggggttttcg aagaaccacg attgccaaac gtgagggtgc aggagacag 360
143 gaggcggacc ccagtgagca gcaaccacag cagcataacc tctccctgcg ccgagtgga 420
145 cggcaaccaa aacgtactga gagggtagaa gattttctta ccacggttcg gcgccgaggg 480
147 aaaaagaatg tgccggtgtc cctggaggat tccagtgagc ccacatcttc cacagtcact 540
149 gatgtggaga cagcttccga ggggagcgtt gaaagcagtt ctgagatcag aagtggccct 600
151 gtatctgact ccttagggaa agaacatcct gcctcttctg aaaaggcaaa aggaggtgaa 660
153 gaggaagaag acacctctga cagtgcaggt gatggcctta cgttgaagga acttcagaac 720
155 cgccttcgga gaaagcgaga gcaagaacct gtggagaggt ccctgagagg cagtcagaat 780
157 cgcctgagga agaagcgag agaggaagat tctgccgaaa ctgggagtgt ccaaataaggc 840
159 agtgccgagc aggacagacc tctctgtaag caggagcctg aggctagtca gggaccagt 900
161 tcccagtcag agacagatga catagaaaat cagttggaag ggaaggcgac tcagggaat 960
163 acagagggaaa accccaggga agcgggcaaa ccaaagcctg agtgtgaggt ttacgacccc 1020
165 aatgccctgt actgcatctg ccgccagcct cacaacaaca ggtttatgat ctgctgtgat 1080
167 cgggtgtgagg agtggttcca tgggtgactgt gtgggtattt ctgaggcccc agggcggtc 1140
169 ctggaaagga acgggggaaga ctacatctgc ccaaattgca ccattttgca agtgcaggat 1200

```

RAW SEQUENCE LISTING

DATE: 05/06/2005

PATENT APPLICATION: US/09/787,016B

TIME: 13:36:59

Input Set : A:\Sequence.txt

Output Set: N:\CRF4\05052005\I787016B.raw

```

171 gagacaaacg gtacgcgccac caatgagcag gactctgggt gcagatctgt ggggtgctgat 1260
173 ggcacagact gcacaagcat agggacagta gagcagaagt ccggagaaga ccagggcata 1320
175 aagggttagga ttgagaaggc agcaaaccac agcggcaaga aaaaactcaa gatattccag 1380
177 cctgtcgtag aggctcctgg tgctcctaaa tgcattggcc ctgggtgttc cagtgtagca 1440
179 cagcctgact ctgtgtattg cagtaatgac tgcattctca aacacgcagc agctaccatg 1500
181 agattttctaa gttcaggtaa agaacaaaaa acaaaaccca aggaaaaggt caagacgaag 1560
183 ccagaaaagt tcagtcttcc aaaatgcagt gttcagggtg ggattaaaaat ctcttctgtg 1620
185 cacaagagac tagcgtcaga gaaaaggga aacccagtga agaaagtgat gctggcttcc 1680
187 aggagtgaga cttctgggaa ggaggcagcc tgtgagagca gcacaccatc ctgggcaagt 1740
189 gaccacaact acaatgctgt gaagccagag aagccagaga agcccactgc actctcgccc 1800
191 accctattga gtaaattgtac gtatcaccca aaggctggct tcccaggccc ctcccatcat 1860
193 ctgggtggct gcctggggct gtctaggacc agagtcctgg gtgttctggg gctgatagta 1920
195 gccagcagct cactgccagc cagaagcaga taccaagatg cctctggacc ccagggtgttc 1980
197 ctgcctagcc tgtggagcct ctctgggtgg ttccataaga gctgtgtagg cctcatgttg 2040
199 gaggcaatth cttatttcag ttttaggcct tggtaagtat ttgaactgct ctcaacaaga 2100
201 tgggacaaca tcagtgcact gttcagactc agttcagact tgagttcctc acaggacagc 2160
203 ccagcacaaa ccatggagtt ttcccacgtt acctattttt cttcaacatg gtcaccactg 2220
205 ctcttctata gaaaagtgat ttttttcatt agttagggca tttttgaaag gacaggtaga 2280
207 caatttgtgt ctatttcaca tactacacac ctacataaac aggtttgaat tttgaaggctc 2340
209 atctgtgct cagatcccat ggtgagtaat cgtgctgacc atacacctac agcagtattc 2400
211 tcatcaaaag gagaattgtg ggtggtagct tccagactcg tagatgcccc agattttcaa 2460
213 tcagtgttta tagtttgagt aaacttttga aacccaagat tagatcactg agtttgagc 2520
215 cattcttgtt tcaactgctt acaaggtaaa cttttcttac tttttgtaca gtgggttcaa 2580
217 gtgaattttc atctgtgttc tcatgatagt gttttgttcc atctctgtcc accctcagcc 2640
219 ccagataagg ggggtctcatg gcctaagctg gccttaaaatt ttctgtaaag ttgggggtcc 2700
221 tcttgcccc acctgtaaag agtgctgaaa cttacaggca cacacctgat gtatgctgtg 2760
223 ggggtgtgaac tcagagtgtt ggaccagcag tctaccagct gagctgcagt tctagccatg 2820
225 gtaactgaaa ctgctgatct tcttgtcttt gtttcctttg tgctggg 2867

```

228 <210> SEQ ID NO: 3

229 <211> LENGTH: 562

230 <212> TYPE: PRT

231 <213> ORGANISM: Homo sapiens

233 <400> SEQUENCE: 3

```

235 Met Asp Asp Lys Gly Asp Pro Ser Asn Glu Glu Ala Pro Lys Ala Ile
236 1 5 10 15
239 Lys Pro Thr Ser Lys Glu Phe Arg Lys Thr Trp Gly Phe Arg Thr
240 20 25 30
243 Thr Ile Ala Lys Arg Glu Gly Ala Gly Asp Ala Glu Ala Asp Pro Leu
244 35 40 45
247 Glu Pro Pro Pro Pro Gln Gln Gln Leu Gly Leu Ser Leu Arg Arg Ser
248 50 55 60
251 Gly Arg Gln Pro Lys Arg Thr Glu Arg Val Glu Gln Phe Leu Thr Ile
252 65 70 75 80
255 Ala Arg Arg Arg Gly Arg Arg Ser Met Pro Val Ser Leu Glu Asp Ser
256 85 90 95
259 Gly Glu Pro Thr Ser Cys Pro Ala Thr Asp Ala Glu Thr Ala Ser Glu
260 100 105 110
263 Gly Ser Val Glu Ser Ala Ser Glu Thr Arg Ser Gly Pro Gln Ser Ala
264 115 120 125

```

RAW SEQUENCE LISTING

DATE: 05/06/2005

PATENT APPLICATION: US/09/787,016B

TIME: 13:36:59

Input Set : A:\Sequence.txt

Output Set: N:\CRF4\05052005\I787016B.raw

```

267 Ser Thr Ala Val Lys Glu Arg Pro Ala Ser Ser Glu Lys Val Lys Gly
268      130      135      140
271 Gly Asp Asp His Asp Asp Thr Ser Asp Ser Asp Ser Asp Gly Leu Thr
272 145      150      155      160
275 Leu Lys Glu Leu Gln Asn Arg Leu Arg Arg Lys Arg Glu Gln Glu Pro
276      165      170      175
279 Thr Glu Arg Pro Leu Lys Gly Ile Gln Ser Arg Leu Arg Lys Lys Arg
280      180      185      190
283 Arg Glu Glu Gly Pro Ala Glu Thr Val Gly Ser Glu Ala Ser Asp Thr
284      195      200      205
287 Val Glu Gly Val Leu Pro Ser Lys Gln Glu Pro Glu Asn Asp Gln Gly
288      210      215      220
291 Val Val Ser Gln Ala Gly Lys Asp Asp Arg Glu Ser Lys Leu Glu Gly
292 225      230      235      240
295 Lys Ala Ala Gln Asp Ile Lys Asp Glu Glu Pro Gly Asp Leu Gly Arg
296      245      250      255
299 Pro Lys Pro Glu Cys Glu Gly Tyr Asp Pro Asn Ala Leu Tyr Cys Ile
300      260      265      270
303 Cys Arg Gln Pro His Asn Asn Arg Phe Met Ile Cys Cys Asp Arg Cys
304      275      280      285
307 Glu Glu Trp Phe His Gly Asp Cys Val Gly Ile Ser Glu Ala Arg Gly
308      290      295      300
311 Arg Leu Leu Glu Arg Asn Gly Glu Asp Tyr Ile Cys Pro Asn Cys Thr
312 305      310      315      320
315 Ile Leu Gln Val Gln Asp Glu Thr His Ser Glu Thr Ala Asp Gln Gln
316      325      330      335
319 Glu Ala Lys Trp Arg Pro Gly Asp Ala Asp Gly Thr Asp Cys Thr Ser
320      340      345      350
323 Ile Gly Thr Ile Glu Gln Lys Ser Ser Glu Asp Gln Gly Ile Lys Gly
324      355      360      365
327 Arg Ile Glu Lys Ala Ala Asn Pro Ser Gly Lys Lys Lys Leu Lys Ile
328      370      375      380
331 Phe Gln Pro Val Ile Glu Ala Pro Gly Ala Ser Lys Cys Ile Gly Pro
332 385      390      395      400
335 Gly Cys Cys His Val Ala Gln Pro Asp Ser Val Tyr Cys Ser Asn Asp
336      405      410      415
339 Cys Ile Leu Lys His Ala Ala Ala Thr Met Lys Phe Leu Ser Ser Gly
340      420      425      430
343 Lys Glu Gln Lys Pro Lys Pro Lys Glu Lys Met Lys Met Lys Pro Glu
344      435      440      445
347 Lys Pro Ser Leu Pro Lys Cys Gly Ala Gln Ala Gly Ile Lys Ile Ser
348      450      455      460
351 Ser Val His Lys Arg Pro Ala Pro Glu Lys Lys Glu Thr Thr Val Lys
352 465      470      475      480
355 Lys Ala Val Val Val Pro Ala Arg Ser Glu Ala Leu Gly Lys Glu Ala
356      485      490      495
359 Ala Cys Glu Ser Ser Thr Pro Ser Trp Ala Ser Asp His Asn Tyr Asn
360      500      505      510
363 Ala Val Lys Pro Glu Lys Thr Ala Ala Pro Ser Pro Ser Leu Leu Tyr

```

RAW SEQUENCE LISTING

DATE: 05/06/2005

PATENT APPLICATION: US/09/787,016B

TIME: 13:36:59

Input Set : A:\Sequence.txt

Output Set: N:\CRF4\05052005\I787016B.raw

```

364          515          520          525
367 Lys Cys Met Tyr His Leu Gly Val Gly Leu Leu Asp Pro Ser Arg Ser
368          530          535          540
371 Phe Trp Ile Ala Ile Pro Trp Ala Cys Pro Gly Leu Gly Val Ala Ala
372 545          550          555          560
375 Leu Cys
379 <210> SEQ ID NO: 4
380 <211> LENGTH: 614
381 <212> TYPE: PRT
382 <213> ORGANISM: Murine spp.
384 <400> SEQUENCE: 4
386 Met Asp Asp Lys Gly His Leu Ser Asn Glu Glu Ala Pro Lys Ala Ile
387 1          5          10          15
390 Lys Pro Thr Ser Lys Glu Phe Arg Lys Thr Trp Gly Phe Arg Arg Thr
391          20          25          30
394 Thr Ile Ala Lys Arg Glu Gly Ala Gly Asp Thr Glu Ala Asp Pro Ser
395          35          40          45
398 Glu Gln Gln Pro Gln Gln His Asn Leu Ser Leu Arg Arg Ser Gly Arg
399          50          55          60
402 Gln Pro Lys Arg Thr Glu Arg Val Glu Glu Phe Leu Thr Thr Val Arg
403 65          70          75          80
406 Arg Arg Gly Lys Lys Asn Val Pro Val Ser Leu Glu Asp Ser Ser Glu
407          85          90          95
410 Pro Thr Ser Ser Thr Val Thr Asp Val Glu Thr Ala Ser Glu Gly Ser
411          100          105          110
414 Val Glu Ser Ser Ser Glu Ile Arg Ser Gly Pro Val Ser Asp Ser Leu
415          115          120          125
418 Gly Lys Glu His Pro Ala Ser Ser Glu Lys Ala Lys Gly Gly Glu Glu
419          130          135          140
422 Glu Glu Asp Thr Ser Asp Ser Asp Ser Asp Gly Leu Thr Leu Lys Glu
423 145          150          155          160
426 Leu Gln Asn Arg Leu Arg Arg Lys Arg Glu Gln Glu Pro Val Glu Arg
427          165          170          175
430 Ser Leu Arg Gly Ser Gln Asn Arg Leu Arg Lys Lys Arg Arg Glu Glu
431          180          185          190
434 Asp Ser Ala Glu Thr Gly Ser Val Gln Ile Gly Ser Ala Glu Gln Asp
435          195          200          205
438 Arg Pro Leu Cys Lys Gln Glu Pro Glu Ala Ser Gln Gly Pro Val Ser
439          210          215          220
442 Gln Ser Glu Thr Asp Asp Ile Glu Asn Gln Leu Glu Gly Lys Ala Thr
443 225          230          235          240
446 Gln Gly Asn Thr Glu Glu Asn Pro Arg Glu Ala Gly Lys Pro Lys Pro
447          245          250          255
450 Glu Cys Glu Val Tyr Asp Pro Asn Ala Leu Tyr Cys Ile Cys Arg Gln
451          260          265          270
454 Pro His Asn Asn Arg Phe Met Ile Cys Cys Asp Arg Cys Glu Glu Trp
455          275          280          285
458 Phe His Gly Asp Cys Val Gly Ile Ser Glu Ala Arg Gly Arg Leu Leu
459          290          295          300

```

VERIFICATION SUMMARY

DATE: 05/06/2005

PATENT APPLICATION: US/09/787,016B

TIME: 13:37:00

Input Set : A:\Sequence.txt

Output Set: N:\CRF4\05052005\I787016B.raw